MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT IDENTIFICATION AND USE						
Lilly Miller Go Lilly Miller Gr	-Snail Granules West Meal Kills Slugs, Snails and Listed Insects sshopper Earwig, Cutworm & Sowbug Bait Kills Slugs and Snails g, Snail & Insect Killer Bait				PRODUCTID	ENTIFICATION
IDENTIFIER EP	REG. NO. 811	9-5			NUMBER (PIN	I)
PRODUCT DRY SLUG, SNAIL AND INSECT CONTROL USE						
MANUFACTURER'S NAME E.M. MATSON, JR. CO., INC.			D., INC.	SUPPLIER'S NAME Lilly Miller Brands		
STREET ADDRESS PO BOX 1820				STREET ADDRESS 16201 SE 98th		
CITY NORTH BEND	STATE	WA		CITY Clackamas		STATE OR
POSTAL CODE 98045				POSTAL CODE 97015		
SE	CTION 2	2 HAZ	ZARDO	US ING	REDIE	NTS
HAZARDOUS INGREDIENTS	%	CAS NI	JMBER	LD ₅₀ OF INC	GREDIENT	LC ₅₀ OF INGREDIENT
METALDEHYDE	2%	9002-91-9		N/A		N/A
CARBARYL**	5%	63-25-2		N/A		N/A
ACETALDEHYDE	****	75-07	7-0	N/A		N/A
****LESS THAN .1%		**1-NAPHTHA	LENOL, METH	IYL CARBAMA	TE	
SECTION 3 PHYSICAL DATA						
PHYSICAL STATE DRY, GRANULAR MEAL		ODOR AND APPEARANCE TAN, GRANULAR MEAL - ODOR OF GRA			ODOR THRESHOLD (PPM) N/A	
VAPOR PRESSURE (mm Hg) N/A	VAPOR DENS (AIR=1)	VAPOR DENSITY EVAPORATION (AIR=1) N/A			BOILING POINT ('C) N/A	
p H N/A	SPECIFIC GF	SPECIFIC GRAVITY COEFF. WAT		ER/OIL DIST. N/A	FREEZING POINT ('C) N/A	
SECTION 4 FIRE AND EXPLOSION DATA						
FLAMMABILITY IF YES, UNDER WHICH CONDITIONS? [X]YES []NO AS WITH ANY POWDERED ORGANIC COMPOUNDS, DUST EXPLOSIONS MAY BE POSSIBLE BUT NOT LIKELY.						

MEANS OF EXTINCTION

FLASHPOINT ('C) AND METHOD N/A		LOWER FLAMMABLE LIMIT (% BY VOLUME) N/A	
AUTOIGNITION TEMPERATURE ('C) N/A	HAZARDOUS COMBUSTION PRODUCTS - OXIDES OF NITROGEN AND CARBON, METHYL ISOCYANATE, TOXIC VAPORS / FUMES OF PARALDEHYDE AND ACETALDEHYDE.		
EXPLOSION DATA N/A	SENSITIVITY TO IMPACT N/A	SENSITIVITY TO STATIC DISCHARGE N/A	

SECTION 5 -- REACTIVITY DATA

IF NO, UNDER WHICH CONDITIONS? CHEMICAL STABILITY [x]YES []NO

INCOMPATIBILITY WITH OTHER SUBSTANCES IF SO, WHICH ONES?

> OXIDIZING AGENTS, STRONG ACIDS, BASES [x]YES []NO

REACTIVITY, AND UNDER WHAT CONDITIONS

HEAT (DECOMPOSITION PRODUCTS OF METALDEHYDE ARE PARALDEHYDE AND ACETALDEHYDE, OF WHICH THE TOXICITY IS KNOWN. ACETALDEHYDE MAY BE OXIDIZED TO ACETIC ACID WHICH MAY CATALYZE THE DECOMPOSITION OF METALDEHYDE.) AVOID EXTREME HEAT AND OPEN FLAME.

HAZARDOUS DECOMPOSITION PRODUCTS

THERMAL DECOMPOSITION MAY PRODUCE TOXIC VAPORS/ FUMES OF PARALDEHYDE, ACETALDEHYDE, OTHER ORGANIC MATERIALS AND OXIDES OF CARBON AND NITROGEN. ALSO, METHYL ISOCYANATE MAY BE PRODUCED.

SECTION 6 -- TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY

SKIN CONTACT [X] SKIN ABSORBTION [X] EYE CONTACT [X] INHALATION [X] INGESTION [X]

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

METALDEHYDE - SALIVATION, VOMITING, NAUSEA, ACETONURIA, CONVULSIONS, INCREASED BODY TEMPERATURE, DEPRESSION OF MEDULLARY, RESPIRATORY AND VASOMOTOR CONTROL CENTERS, COMA. MAY BE FATAL. OVEREXPOSURE MAY AGGRAVATE EXISTING LIVER, KIDNEY AND BRAIN CONDITIONS. CARBARYL - MAY BE FATAL IF SWALLOWED. CAUSES REVERSIBLE CHOLINESTERASE INHIBITION. REPEATED OVEREXPOSURE MAY CAUSE MORE SEVERE CHOLINESTERASE INHIBITION WITH MORE PRONOUNCED SIGNS AND SYMPTOMS. MAY LEAD TO RAPID ONSET OF NAUSEA, VOMITING, DAIRRHEA, ABDOMINAL PAIN, INVOLUNTARY SHAKING, EXCESS SALIVATION, PINPOINT PUPILS, BLURRED VISION, PROFUSE SWEATING, TEMPORARY PARALYSIS, RESPIRATORY DEPRESSION, CONVULSIONS. CAUSES EYE REDNESS, IRRITATION AND TEARING.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT

OVEREXPOSURE MAY AGGRAVATE EXISTING LIVER, KIDNEY AND BRAIN CONDITIONS. INHALATION OF PRODUCT MAY AGGRAVATE EXISTING CHRONIC RESPIRATORY PROBLEMS SUCH AS ASTHMA. EMPHYSEMA OR BRONCHITIS. SKIN CONTACT MAY AGGRAVATE EXISTING SKIN DISEASE.

EXPOSURE LIMITS N/A	IRRITANCY OF PRODUCT N/A	SENSITIZATION TO PRODUCT N/A	CARCINOGENICITY YES - ACETALDEHYDE
TERATOGENICITY	REPRODUCTIVE	MUTAGENICITY	SYNERGISTIC PRODUCTS N/A
N/A	TOXICITY N/A	N/A	

SECTION 7 -- PREVENTATIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT

GLOVES (SPECIFY) LATEX OR RUBBER	RESPIRATOR (SPECIFY) NOT GENERALLY NEEDED FOR OUTDOOR USE	EYE (SPECIFY) SAFETY GLASSES WITH SIDE SHIELDS
FOOTWEAR (SPECIFY) N/A	CLOTHING (SPECIFY) LONG SLEEVED SHIRT	OTHER (SPECIFY)

ENGINEERING CONTROLS (SPECIFY, EG. VENTILATION, ENCLOSED PROCESS)

N/A

LEAK AND SPILL PROCEDURE

CAREFULLY SHOVEL SPILLS INTO APPROPRIATE CONTAINERS FOR DISPOSAL. AVOID GENERATING DUST. WET RESIDUE WITH WATER AND ABSORB WITH INERT MATERIAL (SAND, EARTH, ETC.) AND TRANSFER INTO APPROPRIATE CONTAINERS FOR RECOVERY OR DISPOSAL. KEEP SPILL OUT OF SEWERS AND OPEN BODIES OF WATER.

WASTE DISPOSAL

DO NOT REUSE CARTON. DISCARD CARTON IN TRASH. SECURELY WRAP ORIGINAL CONTAINER IN SEVERAL LAYERS OF NEWSPAPER AND DISCARD IN TRASH. DISPOSE OF IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

HANDLING PROCEDURES AND EQUIPMENT

N/A

STORAGE REQUIREMENTS

STORE IN A COOL, DRY, LOCKED LOCATION OUT OF DIRECT SUNLIGHT, IN ORIGINAL CONTAINER AND NOT ACCESSIBLE TO CHILDREN OR PETS. AVOID CONTAMINATION OF FEED AND FOODSTUFFS.

SPECIAL SHIPPING INFORMATION

N/A

SECTION 8 -- FIRST AID MEASURES

EYES - HOLD EYELIDS OPEN AND FLUSH WITH A STEADY, GENTLE STREAM OF WATER FOR AT LEAST 15 MINUTES. SEEK MEDICAL ATTENTION.

SKIN - IN CASE OF CONTACT, IMMEDIATELY WASH WITH PLENTY OF SOAP AND WATER FOR AT LEAST 5 MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS. REMOVE CONTAMINATED CLOTHING AND SHOES. CLEAN CONTAMINATED CLOTHING AND SHOES BEFORE RE-USE.

INGESTION - IF SWALLOWED, IMMEDIATELY GIVE 3-4 GLASSES OF WATER. <u>DO NOT</u> INDUCE VOMITING. IF VOMITING OCCURS AND VICTIM IS CONSCIOUS, GIVE FLUIDS AGAIN. GET IMMEDIATE MEDICAL ATTENTION. DO NOT LEAVE VICTIM UNATTENDED. VOMITING MAY OCCUR SPONTANEOUSLY. TO PREVENT ASPIRATION OF SWALLOWED PRODUCT, LAY VICTIM ON SIDE WITH HEAD LOWER THAN WAIST. HAVE PHYSICIAN DETERMINE IF PATIENT'S CONDITION ALLOWS INDUCTION OF VOMITING OR EVACUATION OF STOMACH. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

METALDEHYDE - NOTE TO PHYSICIAN - ACCORDING TO HSDB, ADMINISTRATION OF DIAZEPAM OR CLONIDINE 20 MINUTES AFTER INGESTION OF 1000 MG/KG BY MICE DELAYED THE ONSET OF SYMPTOMS AND REDUCED MORTALITY. THEREFORE, DIAZEPAM AND CLONIDINE MAY BE APPROPRIATE ANTIDOTES TO REDUCE THE SYMPTOMATOLOGY OF METALDEHYDE INGESTION.

CARBARYL - NOTE TO PHYSICIAN - ALL TREATMENTS SHOULD BE BASED ON OBSERVED SIGNS AND SYMPTOMS OF DISTRESS IN THE PATIENT. THIS PRODUCT CONTAINS METHYL CARBAMATE INSECTICIDE, WHICH IS A CHOLINESTERASE INHIBITOR. OVEREXPOSURE TO THIS SUBSTANCE MAY CAUSE TOXIC SIGNS AND SYMPTOMS DUE TO STIMULATION OF THE CHOLINERGIC NERVOUS SYSTEM. THESE EFFECTS OF OVEREXPOSURE ARE SPONTANEOUSLY AND RAPIDLY REVERSIBLE.

INHALATION - REMOVE VICTIM FROM IMMEDIATE SOURCE OF EXPOSURE AND ASSURE THAT THE VICTIM IS BREATHING. IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN, IF AVAILABLE. IF VICTIM IS NOT BREATHING, ADMINISTER CPR (CARDIO-PULMONARY RESUSCITATION). SEEK MEDICAL ATTENTION.

SECTION 9 -- PREPARATION DATE OF MSDS

PREPARED BY - DAVE GRASSMAN/SSD	PHONE - 425-888-6212	DATE - JANUARY 1, 2000
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